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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/645,556	08/25/00	SCHOLKENS	U 92481.1702

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FINNEGAN, HENDERSON, FARABOW, GARRETT &  
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1300 I STREET, NW  
WASHINGTON DC 20005

EXAMINER
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BAHAR, M

ART UNIT	PAPER NUMBER
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1617

DATE MAILED:

06/20/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

JUN 22 2001

MD

Docketed 62101 Attorney BCO/SSS  
Case 2481.1702  
Due Date 9-20-01 w/EXT  
Action RESPONSE  
By B

**Office Action Summary**

Application N .

09/645,556

Applicant(s)

SCHOLKENS ET AL.

Examiner

Mojdeh Bahar

Art Unit

1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 & 5.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 3-15 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for specifically named ACE inhibitors, does not reasonably provide enablement for "pharmaceutically acceptable derivatives" of the ACE inhibitors. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. The specification does not provide guidance as to which ACE inhibitor derivatives are useful in the claimed method. Moreover, the specification does not set out criteria for one of ordinary skill in the art to be able to distinguish those derivatives that would be useful in the instant method from those that would not be useful. One of ordinary skill in the art would have to perform undue experimentation in order to identify which derivatives of ACE inhibitors would be useful in the claimed method.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The terms "normal" and "low" in claim 2 is a relative term which renders the claim indefinite. The terms "normal" and "low" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. One of ordinary skill in the art would not know how to define normal, neither would one of ordinary skill be able to ascertain the limits of the term "low". Note that, but for subject matter of an issued US patent, essential subject matter cannot be incorporated by reference into claims.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,5-6,10-12 and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Sudilovsky (EP 0474438 A1).

Sudilovsky (EP 0474438 A1) discloses employing a composition comprising ceronapril in a method of preventing the onset of cerebrovascular disease such as stroke in a normotensive patient in an amount of 0.5 mg to about 30 mg per day, see particularly claims 4,7 and 11 as well as page 2 lines 8-11.

Claims 3, 7 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Tschollar (EP 0426066 A2).

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Tschollar (EP 0426066 A2) discloses the use of an ACE inhibitor for preparing a pharmaceutical composition for preventing onset of type II diabetes in a mammalian species, see claim 1. Tschollar (EP 0426066 A2) further discloses captopril, zofenopril, ceranapril, fentiapril and fosinopril, enalapril and lisinopril as suitable ACE inhibitors, see particularly claims 7-11.

Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Maclaughlan et al. (WO 96/24373).

Maclaughlan et al. (WO 96/24373) discloses the employment of ACE inhibitors in a co-therapy in patients susceptible to congestive heart failure, see particularly claims 1-5, 9 and 11.

Claims 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by FDA Orange Book Active Ingredient Detail Record Search.

FDA Orange Book Active Ingredient Detail Record Search discloses a pharmaceutical composition comprising candesartan cilexetil as the active ingredient.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tschollar (EP 0426066 A2).

Tschollar (EP 0426066 A2) teaches the use of an ACE inhibitor for preparing a pharmaceutical composition for preventing onset of type II diabetes in a mammalian species, see

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claim 1. Tschollar (EP 0426066 A2) further discloses captopril, zofenopril, ceranapril, fentiapril and fosinopril, enalapril and lisinopril as suitable ACE inhibitors, see particularly claims 7-11.

Tschollar (EP 0426066 A2) does not teach the employment of the particular ACE inhibitors recited in the claims in its method of preventing onset of type II diabetes.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ any of the ACE inhibitors recited in the instant claims in Tschollar's (EP 0426066 A2) method of preventing the onset of type II diabetes.

One of ordinary skill in the art would have been motivated to substitute any of the ACE inhibitors recited in the instant claims for captopril, zofenopril, ceranapril, fentiapril and fosinopril, enalapril and lisinopril discussed particularly in Tschollar because based on this reference, all ACE inhibitors would have been reasonably expected to have similar therapeutic effects in a method of preventing the onset of type II diabetes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mojdeh Bahar whose telephone number is (703) 305-1007. The examiner can normally be reached on (703) 305-1007 from 8:30 a.m. to 6:30 p.m. Monday, Tuesday, Thursday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minna Moezie, J.D., can be reached on (703) 308-4612. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

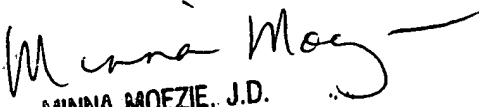
Mojdeh Bahar  
Patent Examiner

Application/Control Number: 09/645,556

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June 8, 2001.

  
MINNA MOEZIE, J.D.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600

\* In the IDS

<b>Notic of References Cit d</b>	Application/Control No. 09/645,556	Applicant(s)/Patent Under Reexamination SCHOLKENS ET AL.	
	Examiner Mojdeh Bahar,	Art Unit 1617	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US- -			
	B	US- -			
	C	US- -			
	D	US- -			
	E	US- -			
	F	US- -			
	G	US- -			
	H	US- -			
	I	US- -			
	J	US- -			
	K	US- -			
	L	US- -			
	M	US- -			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
*	N	EP-0474438-	03-1992	GB	Sudilovsky	-- --
*	O	EP-0426066-	05-1991	US	Tschollar	-- --
*	P	WO-96/24373-	08-1996		McLaughlan et al.	-- --
	Q	- -				
	R	- -				
	S	- -				
	T	- -				

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	FDA Orange Book Active Ingredient Detail Record Search, June 1998.
	V	
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	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

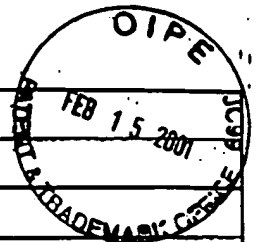
*Mojdeh Bahar*  
06/10/01



Applicant's Copy

OMB No. 0651-0011

INFORMATION DISCLOSURE CITATION  
(Use several sheets if necessary)



Atty. Docket No.	02481.1702	Serial No.	09/645,556
Applicant	Unnamed		
Filing Date	August 25, 2000	Group:	1615

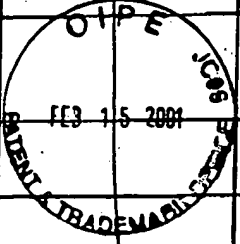
U.S. PATENT DOCUMENTS							
Examiner Initial*	Document Number	Date	Name	Class	Sub Class	Filing Date if Appropriate	
MB	5,202,322	13 Apr 1993	Allen et al.				
	5,219,856	15 June 1993	Oison				
	5,554,625	10 Sept. 1996	Rivero et al.				
	5,827,863	27 Oct. 1998	Almansa et al.				
	5,506,361	09 Apr. 1996	Koh et al.				
	5,470,975	28 Nov. 1995	Atwal				
MB	5,554,624	10 Sept. 1996	Almansa et al.				

FOREIGN PATENT DOCUMENTS							
	Document Number	Date	Country	Class	Sub Class	Translation Yes or N	
MB	EP 0 331 014	06 Sept. 1989	Europe				
	WO 92/10188	25 June 1992	PCT				
	EP 0 474 438	11 Mar. 1992	Europe				
	EP 0 426 066	08 May 1991	Europe				
	WO 96/24373	15 Aug 1996	PCT				
	WO 94/07492	14 Apr. 1994	PCT				
	GB 2 171 103	20 Aug. 1986	Great Britain				
	EP 0 292 923	30 Nov. 1988	Europe				
	EP 0 795 327	17 Sept. 1997	Europe				
	WO 96/40258	19 Dec. 1996	PCT				
	WO 92/19211	12 Nov. 1992	PCT				
MB	EP 0 547 442	23 June 1992	Europe				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
MB	Lee et al., "Effects of perindopril on hypertension and stroke prevention in experimental animals", Can. J. Cardiol, vol. 10 (suppl. D), pp. 33D-36D (1994)
	Yusuf et al., "Effects of an Angiotensin-converting-enzyme inhibitor, Ramipril, on cardiovascular events in high-risk patients", The New England Journal of Medicine, vol. 342, no. 3, pp. 145-153 (2000)
	McKelvie et al., "Role of angiotensin converting enzyme inhibitors in patients with left ventricular dysfunction and congestive heart failure", Eur. Heart J., vol. 15, suppl. B, pp. 9-13 (1994)
MB	Lonn et al., "Emerging approaches in preventing cardiovascular disease", British Medical Journal, vol. 318, pp. 1337-1341 (1999)

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
W/S	Tsuyuki et al., "Combination neurohormonal blockade with ACE inhibitors, angiotensin II antagonists and beta-blockers in patients with congestive heart failure: Design of the Randomized Evaluation of Strategies for Left Ventricular Dysfunction (RESOLVD) Pilot Study", Can. J. Cardiol, vol 13, no. 12, pp. 1166-1174 (1997)
	Patten et al., "Acute and long-term effects of the angiotensin-converting enzyme inhibitor, enalapril, on adrenergic activity and sensitivity during exercise in patients with left ventricular systolic dysfunction", Am. Heart J., vol. 134, pp. 37-43 (1997)
	"Diabetes and Hypertension: Experimental Models", Clin. Exp. Hypertens, vol. 21, pp. 5-6 (1999)
	Avezum et al., "Pharmacological Treatment for Myocardial Infarction Part 2: Implications of Clinical Trials of Other Adjunctive Therapies", Indian Heart J., vol. 47, pp. 95-105 (1995)
	Yusuf et al., "Anti-ischaemic effects of ACE inhibitors. review of current clinical evidence and ongoing clinical trials", Eur. Heart J., vol. 19, supp. J, pp. J36-J44 (1998)
	Gerstein et al., "Rationale and Design of a Large Study to Evaluate the Renal and Cardiovascular Effects of an ACE Inhibitor and Vitamin E in High-Risk Patients With Diabetes", Diabetes Care, vol. 19, no. 11, pp. 1225-1228 (1996)
	Avezum et al., "Recent Advances and Future Directions in Myocardial Infarction", Cardiology, vol. 84, pp. 391-407 (1994)
	Yusuf et al., "Treatment for acute myocardial infarction", Eur. Heart J., vol. 17, supp. F, pp. 16-29 (1996)
	Lonn et al., "Study Design and Baseline Characteristics of the Study to Evaluate Carotid Ultrasound Changes in Patients Treated With Ramipril and Vitamin E: SECURE", Am. J. Cardiol, vol. 78, pp. 914-919 (1996)
	Garg et al., "Overview of Randomized Trials of Angiotensin-Converting Enzyme Inhibitors on Mortality and Morbidity in Patients With Heart Failure", JAMA, vol. 273, no. 18, pp. 1450-1456 (1995)
	Martin et al., "Serum Cholesterol, Blood Pressure, and Mortality: Implications from a Cohort of 361 662 Men", The Lancet, pp. 933-936 (1986)
	Keys, "A Multivariate Analysis of Death and Coronary Heart Disease", Seven Countries, pp.1-381 Harvard University Press (1980)
	Yusuf et al., "Effect of Enalapril on Survival in Patients with Reduced Left Ventricular Ejection Fractions and Congestive Heart Failure", The New England Journal of Medicine, vol. 325, no. 5, pp. 293-302 (1991)
	Yusuf et al., "Effect of enalapril on myocardial infarction and unstable angina in patients with low ejection fractions", The Lancet, vol. 340, no. 8829, pp. 1175-1178 (1992)
	Yusuf et al., "Effect of Enalapril on Mortality and the Development of Heart Failure in Asymptomatic Patients with Reduced Left Ventricular Ejection Fractions", The New England Journal of Medicine, vol. 327, no. 10, pp. 685-691 (1992)
	Pfeffer et al., "Effect of Captopril on Mortality and Morbidity in Patients with Left Ventricular Dysfunction after Myocardial Infarction", The New England Journal of Medicine, vol. 327, no. 10, pp. 669-677 (1992)
	Serruys et al., "Does the New Angiotensin Converting Enzyme Inhibitor Cilazapril Prevent Restenosis After Percutaneous Transluminal Coronary Angioplasty", Circulation, vol. 86, no. 1, pp. 100-110 (1992)
	Abstract From the 65 <sup>th</sup> Scientific Sessions, vol. I-35, no. 207-210
	Canner et al., "Fifteen Year Mortality in Coronary Drug Project Patients: Long-Term Benefit With Niacin", JACC, vol. 8, no. 6, pp. 1245-1255 (1986)
W/S	Francis et al., "Comparison of Neuroendocrine Activation in Patients With Left Ventricular Dysfunction With and Without Congestive Heart Failure", Circulation, vol. 82, pp. 1724-1729 (1990)

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
MP	Collins et al., "Blood pressure, stroke, and coronary heart disease", The Lancet, vol 335, pp. 827-838 (1990)
	Kannel, "Left ventricular hypertrophy as a risk factor: the Framingham experience", Journal of Hypertension, vol. 9 (suppl. 2), pp.53-59 (1991)
	Mujais et al., "Reversal of Left Ventricular Hypertrophy with Captopril: Heterogeneity of Response Among Hypertensive Patients", Clin. Cardiol., vol. 6, pp. 595-602 (1983)
	Powell et al., "Inhibitors of Angiotensin-Converting Enzyme Prevent Myointimal Proliferation After Vascular Injury", Science, vol. 245, pp. 186-188 (1989)
	Campbell-Boswell et al., "Effects of Angiotensin II and Vasopressin on Human Smooth Muscle Cells <i>in Vitro</i> ", Experimental and Molecular Pathology, vol 35, pp. 265-276 (1981)
	Daemen et al., "Angiotensin II Induces Smooth Muscle Cell Proliferation in the Normal and Injured Rat Arterial Wall", Circulation Research, vol. 68, no 2, pp. 450-458 (1991)
	Katz, "Angiotensin II: Hemodynamic Regulator or Growth Facotor ", J. Mol Cell Cardiol, vol. 22, pp. 739-747 (1990)
	Geisterfer et al., "Angiotensin II Induces Hypertrophy, not Hyperplasia, of Cultured Rat Aortic Smooth Muscle Cells", Circulation Research, vol. 62, no. 4, pp. 749-756 (1988)
	Naftulan et al., "Induction of Platelet-derived Growth Factor A-chain and c-myc Gene Expressions by Angiotensin II in Cultured Rat Vascular Smooth Muscle Cells", J. Clin. Invest., vol. 83, pp. 1419-1424 (1989)
	Naftulan et al., "Angiotensin II Induces c-fos Expression in Smooth Muscle Via Transcriptional Control", Hypertension, vol. 13, pp. 706-711 (1989)
	Izumo et al., "Protooncogene induction and reprogramming of cardiac gene expression produced by pressure overload", Proc. Natl. Acad. Sci. USA, vol. 85, pp. 339-343 (1988)
	Dzau, "Cardiac Renin-Angiotensin System", The American Journal of Medicine, vol. 84 (suppl. 3A), pp. 22-27 (1988)
	Brunner et al., "Essential Hypertension: Renin and Aldosterone, Heart Attack and Stroke", The New England Journal of Medicine, vol. 286, no. 9, pp. 441-449 (1972)
	Meade et al., "The epidemiology of plasma renin", Clinical Science, vol. 64, pp. 273-280 (1983)
	Alderman et al., "Association of the Renin-Sodium Profile with the Risk of Myocardial Infarction in Patients with Hypertension", The New England Journal of Medicine, vol. 324, no. 16, pp. 1098-1104 (1991)
	Pfeffer et al., "Effect of Captopril on progressive ventricular dilatation after anterior myocardial infarction", The New England Journal of Medicine, vol. 319, No. 2, pp. 80-86 (1988)
	Dunn et al., "Enalapril Improves Systemic and Renal Hemodynamics and Allows Regression of Left Ventricular Mass in Essential Hypertension", Am. J. Cardiol, vol. 53, pp 105-108 (1984)
	Dzau, "Angiotensin converting enzyme inhibitors and the cardiovascular system", Journal of Hypertension, vol. 10 (suppl. 3), pp. S3-S10 (1992)
	Richard, "The Cellular Biology of Angiotensin: Paracrine, Autocrine and Intracrine Actions in Cardiovascular Tissues", J. Mol. Cell. Cardiol, vol. 21 (suppl. V), pp. 63-69 (1989)
	Boutmier et al., "Cardiac hypertrophy and arterial distensibility in essential hypertension", Am. Heart J., vol. 109, no. 6, pp. 1345-1352 (1985)
	Santoni et al., "Angiotensin converting enzyme inhibition, pulse wave velocity and ambulatory blood pressure measurement in essential hypertension", Clin. And Exper.-Theory and Practice, vol. A11 (suppl. 2), pp. 535-544 (1989)
MS	JACC, vol. 19, no. 3, abstracts 207A, nos. 768-3, 768-4, 768-5, and 768-6 (1992)

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
Wb	Mak et al., "Protective effects of sulfhydryl-containing angiotensin converting enzyme inhibitors against free radical injury in endothelial cells", <i>Biochemical Pharmacology</i> , vol. 40, no. 9, pp. 2169-2175 (1990)
	Chobanian, "The Effects of ACE Inhibitors and Other Antihypertensive Drugs on Cardiovascular Risk Factors and Atherogenesis", <i>Clin. Cardio.</i> , vol. 13, pp. VII-43-48 (1990)
	Chobanian et al., "Antatherogenic Effect of Captopril in the Watanabe Heritable Hyperlipidemic Rabbit", <i>Hypertension</i> , vol. 15, pp. 327-331 (1990)
	Aberg et al., "Effects of Captopril on Atherosclerosis in Cynomolgus Monkeys", <i>Journal of Cardiovascular Pharmacology</i> , vol. 15 (suppl. 5), pp. S65-S72 (1990)
	IP et al., "Syndromes of Accelerated Atherosclerosis: Role of Vascular Injury And Smooth Muscle Cell Proliferation", <i>JACC</i> , vol. 15, no. 7, pp. 1667-1687 (1990)
	Ross, "The Pathogenesis of Atherosclerosis - and update", <i>The New England Journal of Medicine</i> , vol. 314, no. 8, pp. 488-499 (1986)
	MacMahon et al., "Blood pressure, stroke, and coronary heart disease", <i>The Lancet</i> , vol. 335, pp. 765-774 (1990)
	Yusuf et al., "Primary and secondary prevention of myocardial infarction and strokes: and update of randomly allocated, controlled trials", <i>Journal of hypertension</i> , vol. 11 (suppl. 4), pp. S61-S73 (1993)
	Schreiner et al., "Antihypertensive Efficacy, Tolerance, and Safety of Long-Term Treatment with Ramipril in Patients with Mild-to-Moderate Essential Hypertension", <i>Journal of Cardiovascular Pharmacology</i> , vol. 18 (suppl. 2), pp. S137-S140 (1991)
	Cambien et al., "Deletion polymorphism in the gene for angiotensin-converting enzyme is a potent risk factor for myocardial infarction", <i>Letters to Nature</i> , vol. 359, pp. 641-644 (1992)
	Yusuf et al., "Randomised trial of intravenous atenolol among 16 027 cases of suspected acute myocardial infarction: ISIS-1", <i>The Lancet</i> , pp. 57-66 (1986)
	Yusuf et al., "Randomised trial of intravenous streptokinase, oral aspirin, both, or neither among 17 187 cases of suspected acute myocardial infarction: ISIS-2", <i>The Lancet</i> , pp. 349-360 (1988)
	Cairns et al., "ISIS-3: a randomised comparison of streptokinase vs tissue plasminogen activator vs anistreplase and of aspirin plus heparin vs aspirin alone among 41 299 cases of suspected acute myocardial infarction", <i>The Lancet</i> , vol. 339, no. 8796, pp. 753-770 (1992)
	Goldman et al., "Saphenous Vein Graft Patency 1 Year After Coronary Artery Bypass Surgery and Effects of Antiplatelet Therapy", <i>Circulation</i> , vol. 80, pp. 1190-1197 (1989)
	Holmes et al., "Long-term Outcome of Patients With Depressed Left Ventricular Function Undergoing Percutaneous Transluminal Coronary Angioplasty", <i>Circulation</i> , vol. 87, no. 1, pp. 21-29 (1993)
	"Aspirin Effects on Mortality and Morbidity in Patients With Diabetes Mellitus", <i>JAMA</i> , vol. 268, no. 10, pp. 1292-1300 (1992)
	Stamler et al., "Diabetes, Other Risk Factors, and 12-Yr Cardiovascular Mortality for Men Screened in the Multiple Risk Factor Intervention Trial", <i>Diabetes Care</i> , vol. 16, no. 2, pp. 434-444 (1993)
	Uusitupa et al., "5-Year Incidence of Atherosclerotic Vascular Disease in Relation to General Risk Factors, Insulin Level, and Abnormalities in Lipoprotein Composition in Non-Insulin-Dependent Diabetic and Nondiabetic Subjects", <i>Circulation</i> , vol. 82, pp. 27-36 (1990)
	Schwartz et al., "Pathogenesis of the Atherosclerotic Lesion", <i>Diabetes Care</i> , vol. 15, no. 9, pp. 1156-1167 (1992)
Wb	Donahue et al., "Diabetes Mellitus and Macrovascular Complications", <i>Diabetes Care</i> , vol. 15, no. 9, pp. 1141-1155 (1992)

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
MS	Deckert et al., "Microalbuminuria", Diabetes Care, vol. 15, no. 9, pp. 1181-1191 (1992)
	Mathiesen et al., "Efficacy of captopril in postponing nephropathy in normotensive insulin dependent diabetic patients with microalbuminuria", BMJ, vol. 303, pp. 81-87 (1991)
	Sampson et al., "Regression of Left Ventricular Hypertrophy with 1 Year of Antihypertensive Treatment in Type 1 Diabetic Patients with Early Nephropathy", Diabetic Medicine, vol. 8, pp. 106-110 (1991)
	Watson et al., "Effects of captopril on glucose tolerance in elderly patients with congestive cardiac failure", vol. 12, no. 6, pp. 374-378 (1991)
	Neil et al., "A Prospective Population-Based Study of Microalbuminuria as a Predictor of Mortality in NIDDM", Diabetes Care, vol. 16, no. 7, pp. 996-1003 (1993)
	Viberti et al., "Diabetic Nephropathy", Diabetes Care, vol. 15, no. 9, pp. 1216-1225 (1992)
	Stein et al., "Drug Treatment of Hypertension in Patients With Diabetes Mellitus", Diabetes Care, vol. 14, no. 6, pp. 425-448 (1991)
	David et al., "Long-Term Stabilizing Effect of Angiotensin-converting Enzyme Inhibition on Plasma Creatinine and on Proteinuria in Normotensive Type II Diabetic Patients", Annals of Internal Medicine, vol. 118, no. 8, pp. 577-581 (1993)
	Weidmann et al., "Antihypertensive therapy in diabetic patients", Journal of Human Hypertension, vol. 6 (suppl. 2), pp. S23-S38 (1992)
	Kasiske et al., "Effect of Antihypertensive Therapy on the Kidney in Patients with Diabetes: A Meta-Regression Analysis", Annals of Internal Medicine, vol. 118, pp. 129-138 (1993)
	Valentino et al., "A Perspective on Converting Enzyme Inhibitors and Calcium Channel Antagonists in Diabetic Renal Disease", Arch Intern Med., vol. 151, pp. 2367-2372 (1991)
	Steinberg et al., "Modifications of Low-Density Lipoprotein That Increase Its Atherogenicity", The New England Journal of Medicine, vol. 320, no. 14, pp. 915-924 (1989)
	Lonn et al., "Emerging Role of Angiotensin-Converting Enzyme Inhibitors in Cardiac and Vascular Protection", Circulation, vol. 90, no. 4, pp. 2056-2069 (1994)
	Yusuf et al., "Effect of enalapril on myocardial infarction and unstable angina in patients with low ejection fractions", The Lancet, vol. 340, no. 8829, pp. 1173-1178 (1992)
	Lewis et al., "The effect of angiotensin-converting-enzyme inhibition on diabetic nephropathy", The New England Journal of Medicine, vol. 329, no. 20, pp. 1456-1462 (1993)
	Yusuf et al., "The HOPE (Heart Outcomes Prevention Evaluation) Study: The design of a large simple randomized trial of an angiotensin-converting enzyme inhibitor (ramipril) and vitamin E in patients at high risk of cardiovascular events", Can J Cardiol, vol. 12, no. 2, pp. 127-137 (1996)
	Gottlieb et al., "Effect of ramipril on mortality and morbidity of survivors of acute myocardial infarction with clinical evidence of heart failure", The Lancet, vol. 342, pp. 821-828 (1993)
	Yusuf et al., "Beta Blockade During and After Myocardial Infarction: An Overview of the Randomized Trials", Progress in Cardiovascular Diseases, vol. XXVII, No. 5 (March/April), pp. 335-371 (1985)
	"Collaborative overview of randomised trials of antiplatelet therapy—1: Prevention of death, myocardial infarction, and stroke by prolonged antiplatelet therapy in various categories of patients", BMJ, vol. 308 pp. 81-106 (1994)
MS	Yusuf et al., "Lipids and cardiovascular disease", Evidence Based Cardiology, BMJ Books, pp. 191-206 (1998)

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
W2	Hansson et al., "Effects of intensive blood-pressure lowering and low-dose aspirin in patients with hypertension: principal results of the Hypertension Optimal Treatment (HOT) randomised trial", The Lancet, vol. 351, pp. 1755-1762 (1998)
	Clarke et al., "Underestimation of Risk Associations Due to Regression Dilution in Long-term Follow-up of Prospective Studies", Am. Journal of Epidemiology, vol. 150, no. 4, pp. 341-353 (1999)
	Schieffer et al., "Expression of Angiotensin II and Interleukin 6 in Human Coronary Atherosclerotic Plaques", Circulation, vol. 101, pp. 1372-1378 (2000)
	Hansson et al., "Effect of angiotensin-converting-enzyme inhibition compared with conventional therapy on cardiovascular morbidity and mortality in hypertension: the Captopril Prevention Project (CAPPP) randomised trial", The Lancet, vol. 353, pp. 611-616 (1999)
	Ruggenenti et al., "Renoprotective properties of ACE-inhibition in non-diabetic nephropathies with non-nephrotic proteinuria", The Lancet, vol. 354, pp. 359-364 (1999)
	Nicoletti et al., "Cardiac fibrosis and inflammation: interaction with hemodynamic and hormonal factors", Cardiovascular Research, vol. 41, pp. 532-543 (1999)
	Sasayama et al., "New insights into the pathophysiological role for cytokines in heart failure", Cardiovascular Research, vol. 42, pp. 557-564 (1999)
	Swynghedauw, "Molecular Mechanism of Myocardial Remodeling", Physiological Reviews, vol. 79, no. 1, pp. 215-262 (1999)
	Mann et al., "Basic Mechanisms in Congestive Heart Failure", Chest, vol. 105, no. 3, pp. 897-904 (1994)
	Deng et al., "Proinflammatorische Zytokine und kardiale Pumpfunktion", Z. Kardiol, vol. 6, pp. 788-802 (1997)
	Matsumori, "The use of cytokine inhibitors A new therapeutic insight into heart failure", Int. Journal of Cardiology, vol. 62 (suppl. 1), pp. S3-S12 (1997)
	Derwent Abstract of EP 0 331 014
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Active Ingredient: CANDESARTAN CILEXETIL  
Dosage Form;Route: Tablet; Oral      ||  
Proprietary Name: ATACAND  
Applicant: ASTRAZENECA  
Strength: 4MG  
Application Number: 020838  
Product Number: 001  
Approval Date: Jun 04, 1998  
Reference Listed Drug: No  
RX/OTC/DISCN: RX  
TE Code: "

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Active Ingredient: CANDESARTAN CILEXETIL  
Dosage Form;Route: Tablet; Oral  
Proprietary Name: ATACAND  
Applicant: ASTRAZENECA  
Strength: 8MG  
Application Number: 020838  
Product Number: 002  
Approval Date: Jun 04, 1998  
Reference Listed Drug: No  
RX/OTC/DISCN: RX  
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Active Ingredient: CANDESARTAN CILEXETIL  
Dosage Form;Route: Tablet; Oral  
Proprietary Name: ATACAND  
Applicant: ASTRAZENECA  
Strength: 16MG  
Application Number: 020838  
Product Number: 003  
Approval Date: Jun 04, 1998  
Reference Listed Drug: No  
RX/OTC/DISCN: RX  
TE Code:

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Active Ingredient:	CANDESARTAN CILEXETIL
Dosage Form;Route:	Tablet; Oral
Proprietary Name:	ATACAND
Applicant:	ASTRAZENECA
Strength:	32MG
Application Number:	020838
Product Number:	004
Approval Date:	Jun 04, 1998
Reference Listed Drug	Yes
RX/OTC/DISCN:	RX
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